

HELICOPTERS



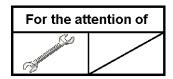
ASB EC135-64A-007

Valid for Version(s): T1, T2, T2+, T3, P1, P2, P2+, P3, 635 T1, 635 T2+, 635 T3, 635 P2+, 635 P3

ALERT SERVICE BULLETIN

PROTECTIVE MEASURE

TAIL ROTOR - Tail rotor blade Inspection of the drain hole alignment of the blade assy





Revision No.	Date of issue
Revision 0	2020-11-11

Summary:

With this Alert Service Bulletin (ASB), Airbus Helicopters prescribes a one-time inspection of the drain hole alignment of the blade assy.

Compliance:

It is mandatory to obey this ASB.



1 PLANNING INFORMATION

1.A EFFECTIVITY

1.A.1 Helicopters/installed equipment and parts

a) EC135 T1, T2, T2+, T3, P1, P2, P2+, P3, 635 T1, 635 T2+, 635 T3, 635 P2+, 635 P3, S/N 0001 up to S/N 1999*.

* On the S/N 0886 the inspection of the drain hole alignment of the blade assy is accomplished in the serial production but needs to be done again if the blade assy has been replaced in service.

b) Blade assy**

P/N L642A2002101

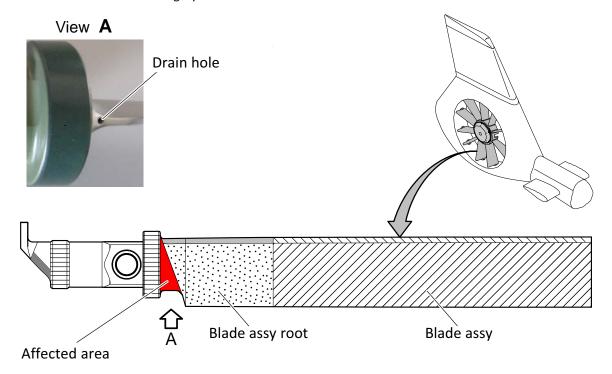
P/N L642A2002103

P/N L642A2002104

P/N L642A2002111

P/N L642A2002112

** On the excluded S/N, as shown in Section 4.B, the inspection of the drain hole alignment of the blade assy has been accomplished in the serial production. These blade assys have been considered as category A as shown in Table 1.



Location of the blade assy drain hole Figure 1

1.A.2 Non-installed equipment and parts

See Section 1.A.1.b.

1.B ASSOCIATED REQUIREMENTS

It is recommended to accomplish ASB EC135-64A-006 or ASB EC135H-64A-001 prior to this ASB.



1.C REASON

This ASB introduces a one-time inspection for drain hole alignment of the Fenestron blade assembly. This ASB has been introduced following an airworthiness investigation on the EC130 and the requirement has been transferred to the EC135 based on the similarities in the production method. Additionally with this ASB, limits on repair details in AMM 64-22-00, 6-4 have been introduced (no further repairs are allowed in the affected area of the blade assy root).

1.D DESCRIPTION

Inspect the drain hole alignment of the blade assy. Replace the blade assy if required.

1.E COMPLIANCE

1.E.1 Compliance at H/C manufacturer level

Helicopters/installed equipment and parts:

The inspection of the drain hole alignment of the blade assy and the replacement of the blade assy (if required) must be accomplished in accordance with Section 3.B.2 of this ASB before delivery of the helicopter.

Non-installed equipment and parts:

The inspection of the drain hole alignment of the blade assy and the replacement of the blade assy (if required) must be accomplished in accordance with Section 3.B.5 of this ASB before delivery or installation.

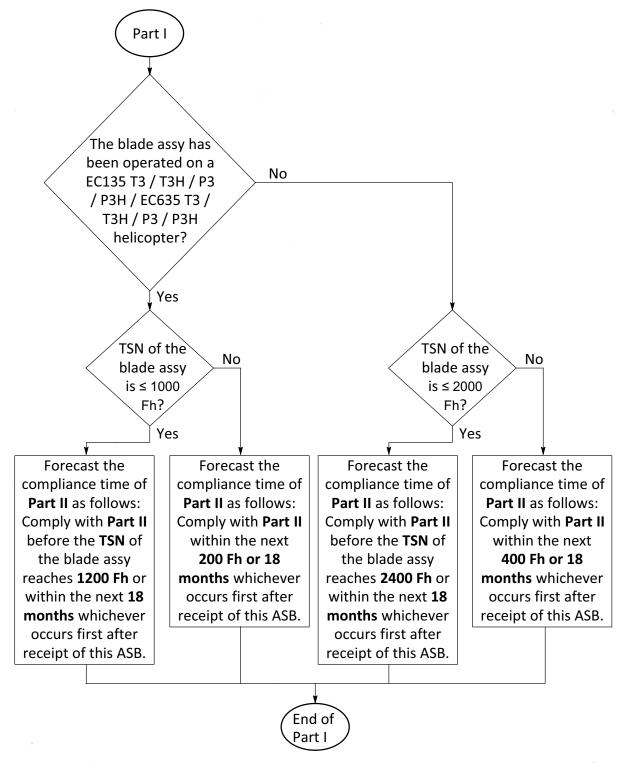


1.E.2 Compliance in service

Helicopters/installed equipment and parts:

Part I: Examine the blade assy documents

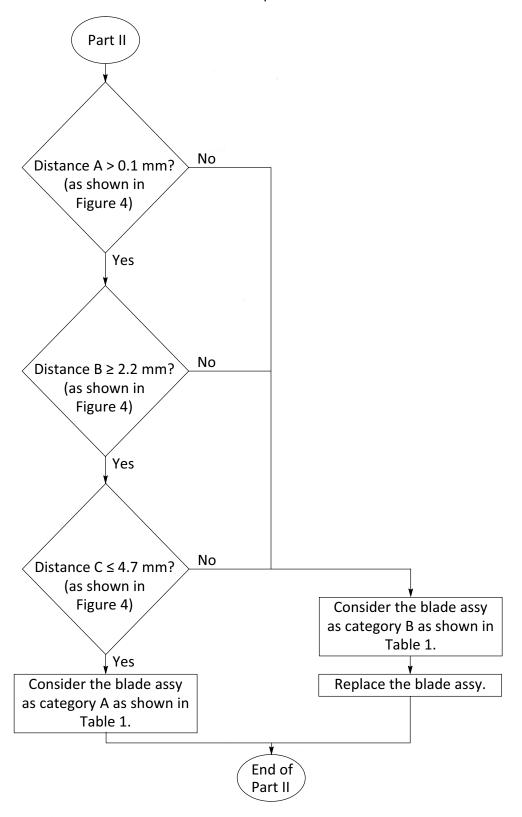
Examine the blade assy documents and forecast the compliance time of **Part II** in accordance with Section 3.B.1 of this ASB within the next **50 Fh or 18 months** whichever occurs first after receipt of this ASB.





Part II: Inspect the drain hole alignment of the blade assy

After accomplishment of **Part I** of this ASB inspect the drain hole alignment of the blade assy and replace the blade assy (if required) in accordance with Section 3.B.2 of this ASB within the forecasted compliance time.





Non-installed equipment and parts:

Part I and Part II

The inspection of the drain hole alignment of the blade assy and the replacement of the blade assy (if required) must be accomplished in accordance with Section 3.B.5 of this ASB before installation but latest 18 months after receipt of this ASB.

1.F APPROVAL

Approval of this document:

The technical content of this document is approved under the authority of DOA No. EASA.21J.700.

1.G MANPOWER

Qualification	Mechanic	Electrician	Pilot	Others*			
Part I: Examine the blade assy documents							
Estimated Man-hours	-	-	-	approx. 2 h			
Part II: Inspect the drain hole alignment of the blade assy							
Fating at a d	approx. 2 h (inspection)	-	approx. 2 h				
Estimated Man-hours**	approx. 8 h (replacement, if required)	-	(replacement, if required)	approx. 3 h			
* CAMO (or equivalent) ** Based on installed tail rotor head assy							

1.H WEIGHT AND BALANCE

No effect on weight and balance.

1.I POWER CONSUMPTION

Not affected.

1.J SOFTWARE UPGRADES/UPDATES

Not changed.

1.K REFERENCES

AMM EC135/635.

1.L OTHER AFFECTED PUBLICATIONS

Not affected.





1.M INTERCHANGEABILITY OR MIXABILITY OF PARTS

Interchangeability:

Not affected.

Mixability:

Not affected.



2 MATERIAL INFORMATION

2.A MATERIAL: PRICE - AVAILABILITY - PROCUREMENT

None.

2.B LOGISTIC INFORMATION

None.

2.C MATERIAL REQUIRED PER HELICOPTER/COMPONENT

Consumables to be ordered separately:



WARNING

RESPECT THE SAFETY DATA SHEET OF THE MANUFACTURER.

No.	Keyword	Qty. (approx.)	Specification **	CM	Rem.
1	Cleaning agent	a.n.*	-	201	-

^{*} a.n. = as needed.

The consumables can be ordered separately from the following companies.

Aviatec global aviation

Website: https://www.boeingdistribution.com

BDSI

Telephone: +33 1.34.46.45.24 or Telephone: +1.305.925.2600

+49 4193.8803.630 Fax: +1.305.507.7191

Fax: +33 1.34.46.45.26 or AOG: +1.305.471.8888

+49 4193.8803.699 AOG email: AOGdesk@boeingdistribution.com

AOG: +49 4193.8803.660

AOG email: aog@aviatec.aero

Gaches chimie

Website: https://www.gaches.com Telephone: +33 5.61.31.64.45

Fax: +33 5.61.40.98.63

AOG email: marketplace@gaches.com

^{**} For specification, refer to AMM 01-00-00, 2-1.



Special tools (test equipment):

Keyword	Qty.	Specification	Rem.
Ruler	1	Commercial available	-
Smartphone or			А
Digital camera and	1	Commercial available	-
PC or Laptop		,	В

Remark:

- A = With Artificial Image Recognition for Blade (A.I.R Blade) app version V1 for EC135/635 installed. For the user manual and additional information see IN 3583-I-64.
- B = With specific Microsoft PowerPoint file version V1 for EC135/635 installed. For the user manual and additional information see IN 3583-I-64.

2.D MATERIAL TO BE RETURNED

None.



3 ACCOMPLISHMENT INSTRUCTIONS

3.A GENERAL

Obey the "General recommendations for Working at helicopter" (AMM 03-10-02, 2-1).

3.B WORK STEPS

Part I: Examine the blade assy documents

3.B.1 Examination of the blade assy documents

NOTE The blade assy is listed in the log card of the tail rotor head assy.

1. Examine the documents of each individual blade assy to determine the Time Since New (TSN) of the blade assy.

NOTE

The load on the blade assy operated on a EC135 T3 / EC135 T3H / EC135 P3 / EC135 P3H / EC635 T3 / EC635 T3H / EC635 P3 / EC635 P3H helicopter is higher.

- 2. Examine the documents of each individual blade assy to determine if it has been operated on a EC135 T3 / EC135 T3H / EC135 P3 / EC135 P3H / EC635 T3 / EC635 T3H / EC635 P3 / EC635 P3H helicopter.
- 3. Use the flowchart in Section 1.E.2 to forecast the compliance time of **Part II**.
- 4. Proceed in accordance with Section 3.C to confirm accomplishment of Part I.



Part II: Inspect the drain hole alignment of the blade assy

3.B.2 Inspection of the drain hole alignment of the blade assy

NOTE This procedure is to be carried out for each individual blade assy.

NOTE It is recommended that two persons accomplish this procedure, if

the blade assy is installed.

NOTE There are two possible procedures for the inspection of the drain

hole alignment of the blade assy:

- Inspection with the A.I.R Blade app version V1 for EC135/635.

- Inspection with picture and specific Microsoft PowerPoint file

version V1 for EC135/635.

NOTE For the user manual and additional information for the possible

procedures see IN 3583-I-64.

1. Clean the area around the drain hole (2, Fig. 2) with cleaning agent (CM 201).

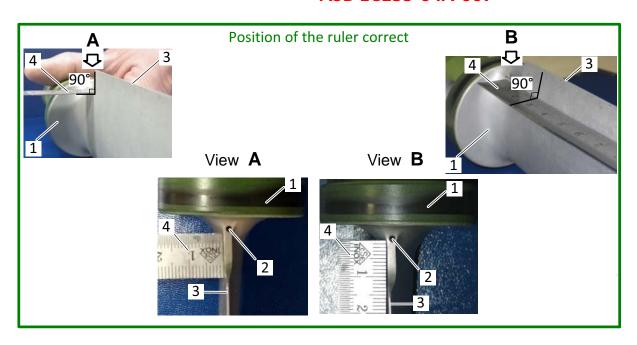
NOTE The drain hole alignment of the blade assy can be inspected from

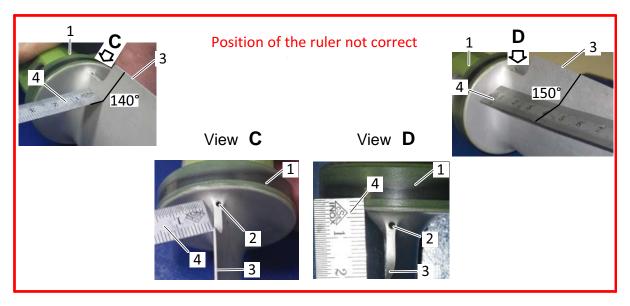
the left and right side of the helicopter.

2. If required, move the yaw pedal (left or right) as required to expose the drain hole (2, Fig. 2).

3. Temporary mark the blade assys (1, Fig. 2) in the area of the drain hole (2) for identification (e.g. with numbers from one to ten or with the S/N of the blade assy (1)).

4. Position the ruler (4, Fig. 2) perpendicular and adjacent to the trailing edge (3) as shown in Figure 2.





- 1 Blade assy
- P/N L642A2002101 or P/N L642A2002103 or P/N L642A2002104 or P/N L642A2002111 or P/N L642A2002112
- 2 Drain hole
- 3 Trailing edge
- 4 Ruler 🔨
- 1 Perpendicular and adjacent to the trailing edge.

Position of the ruler Figure 2

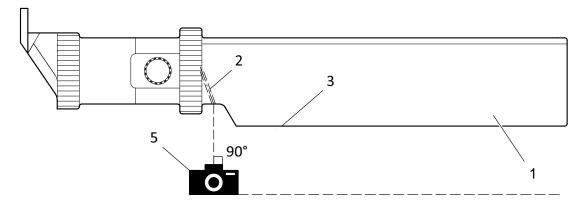


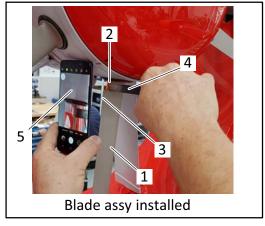
5. Position the smartphone or digital camera (5, Fig. 3) perpendicular to the drain hole (2) and parallel to the trailing edge (3) of the blade assy (1) as shown in Figure 3.

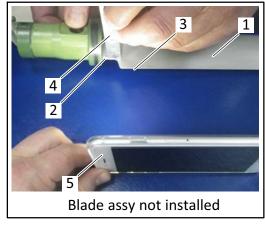


TEST RESULTS CAN BE INFLUENCED WITH ANY OF THE FOLLOWING FACTORS:

- BRIGHTNESS IS NOT SUFFICIENT
- DRAIN HOLE IS NOT IN FOCUS
- ZOOM IS NOT APPROPRIATE.
- 6. Take a picture of the drain hole (2, Fig. 3) of the blade assy (1).







- 1 Blade assy
- P/N L642A2002101 or P/N L642A2002103 or P/N L642A2002104 or P/N L642A2002111 or P/N L642A2002112
- 2 Drain hole
- 3 Trailing edge
- 4 Ruler
- 5 Smartphone or digital camera \wedge
- $ilde{\Lambda}$ Perpendicular to the drain hole and parallel to the trailing edge of the blade assy.

Recommended smartphone or digital camera position to take a picture Figure 3



- 7. Measure the distance A, B and C and examine each individual blade assy:
 - a. Measure distance A, the minimum remaining rib thickness of the blade assy (1, Fig. 4), as shown in Figure 4.
 - b. Compare the results with Table 1.
 - If the results are within the limits of category A, proceed in accordance with Section 3.B.2.7.c.
 - If the results are **not** within the limits of category A, consider the blade assy (1, Fig. 4) as category B. Proceed in accordance with Section 3.B.4.
 - If the results cannot be confirmed, proceed in accordance with Section 3.B.3.
 - c. Measure distance B, the rib thickness of the blade assy (1, Fig. 4) on the center line (4) of the drain hole (2), as shown in Figure 4.
 - d. Compare the results with Table 1.
 - If the results are within the limits of category A, proceed in accordance with Section 3.B.2.7.e.
 - If the results are **not** within the limits of category A, consider the blade assy (1, Fig. 4) as category B. Proceed in accordance with Section 3.B.4.
 - If the results cannot be confirmed, proceed in accordance with Section 3.B.3.
 - e. Measure distance C, between the center line (4, Fig. 4) of the drain hole (2) and the shoulder (5) of the blade assy (1), as shown in Figure 4.
 - f. Compare the results with Table 1.
 - If the results are within the limits of category A, consider the blade assy (1, Fig. 4) as category A and remove the temporary mark from the blade assy (1). Proceed in accordance with Section 3.C.
 - If the results are **not** within the limits of category A, consider the blade assy (1, Fig. 4) as category B. Proceed in accordance with Section 3.B.4.
 - If the results cannot be confirmed, proceed in accordance with Section 3.B.3.

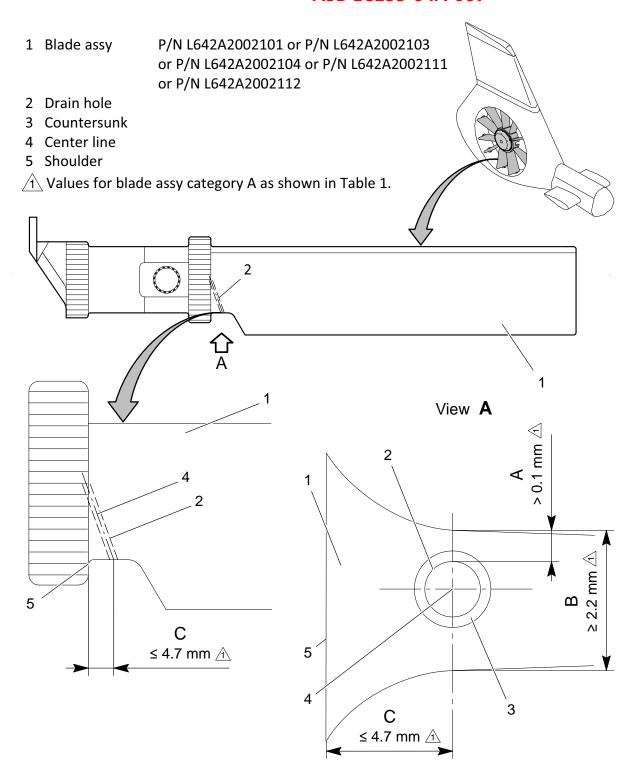


Category A (compliant blade assy)	Category B (non-compliant blade assy)
Distance A is more than 0.1 mm.	Distance A is less than or equal to 0.1 mm.
and	or
Distance B is more than or equal to 2.2 mm.	Distance B is less than 2.2 mm.
and	or
Distance C is less than or equal to 4.7 mm.	Distance C is more than 4.7 mm.

Blade assy categories Table 1

AIRBUS

ASB EC135-64A-007



Inspection of the drain hole alignment of the blade assy Figure 4

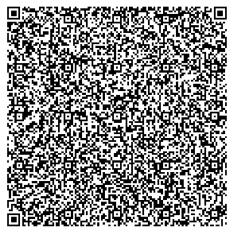


3.B.3 Contact Airbus Helicopters to request support

- 1. Send the picture of the blade assy (1, Fig. 4) to Airbus Helicopters.
 - a. With WebTEK access:
 - Create a Technical Event (TE) on WebTEK:
 https://keycopter.airbushelicopters.com
 - Select the TE business domain: "ASB Fenestron Blade"
 - Insert the title: "Support request for ASB EC135-64A-007 Revision 0"
 - Attach the picture of the blade assy (1, Fig. 4).
 - Send the TE.
 - b. Without WebTEK access:
 - Send the picture of the blade assy (1, Fig. 4) to: customersupport.helicopters@airbus.com
- 2. Continue as detailed in the support feedback received from Airbus Helicopters.

3.B.4 Replacement of the blade assy

- 1. If installed, remove the blade assy (1, Fig. 4) (AMM 64-22-00, 4-3).
- 2. Provide feedback to Airbus Helicopters.
 - a. With WebTEK access:
 - Create a TE on WebTEK: https://keycopter.airbushelicopters.com
 - Select the TE business domain: "ASB Fenestron Blade"
 - Insert the title: "ASB EC135-64A-007 Revision 0 Blade assy category B"
 - Attach the picture of the blade assy (1, Fig. 4).
 - Send the TE.
 - b. Without WebTEK access:
 - Use the QR-Code:



or

- Copy, fill out and send back the reply form sheet on page 20.



- 3. Discard the blade assy (1, Fig. 4).
- 4. If removed, install a serviceable blade assy (1, Fig. 4) (AMM 64-22-00, 4-4).

3.B.5 Work steps for non-installed equipment or parts

Stock retrofitting:

Inspect the blade assy in accordance with Section 3.B.2.

3.C COMPLIANCE CONFIRMATION

Compliance with this document:

Part I: Examine the blade assy documents

Confirm accomplishment of **Part I** of this ASB by an entry in the historical record of the helicopter.

Part II: Inspect the drain hole alignment of the blade assy

Confirm accomplishment of **Part II** of this ASB by an entry in the historical record of the helicopter.

Part I and Part II

Record full compliance with this ASB, with the revision number, in the helicopter documents.

Record full compliance with this ASB, with the revision number, in the log card of the equipment (if a log card exists).

Please confirm compliance with this ASB (see IN 3447-I-00 for details): QR-Code or hypertext link



ASB EC135-64A-007

NOTE

The recording of compliance with ASBs in the R-Tex tool does not replace the recording in the helicopter documents



3.D OPERATING AND MAINTENANCE INSTRUCTIONS

Operating instructions:

None.

Maintenance instructions:

NOTE

Repair in the affected area of the blade assy root (Fig. 1) that was

done prior to this ASB is examined with this ASB.

Repair in the affected area of the blade assy root (Fig. 1) in accordance with AMM 64-22-00, 6-4 is **not** permitted.

NOTE

The pre-print of the inspection - tail rotor blade

(AMM 64-22-00, 6-4) is published on ORION.

Until the distribution of the AMM EC135/635 containing the new instructions, the inspection - tail rotor blade (AMM 64-22-00, 6-4) must be used as shown in Section 4.C.



4 APPENDIX

4.A Reply form sheet

Reply form sheet

for ASB EC135-64A-007 Revision 0 "Inspection of the drain hole alignment of the blade assy"

Please completely fill out reply form sheet and send it to the given e-mail.

To Airbus Helicopters Customer Support e-mail: customersup	port.helico _l	oters@airb	ous.com			· ·
		Tail ro	tor head assy			
P,	/N		S/	'N	TSI (Fh	
		8				
	<u></u>	ВІ	ade assy	,	,	-
P/N	S/N	TSN (Fh)	Distance A (mm)	Distance B (mm)	Distance C (mm)	Category
						В
						В
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	I	,		•	•	1
Date:			Signature:			
Please c	opy page! (Original pa	ge remains in	Alert Service	e Bulletin!	



4.B Exluded S/N of the blade assy

Excluded S/N of the blade assy

On the excluded S/N the inspection of the drain hole alignment of the blade assy has been accomplished in the serial production. These blade assys have been considered as category A as shown in Table 1.

M18523 M18953 M19208 M19366 M20078 M20303 M20665 M20712 M18525 M18954 M19214 M19366 M20078 M20304 M20669 M20714 M18532 M18958 M19212 M19374 M20081 M20305 M20670 M20715 M18537 M18960 M19233 M19391 M20083 M20307 M20674 M20716 M18541 M19086 M19238 M19396 M20085 M20308 M20678 M20716 M18542 M19113 M19241 M19579 M20095 M20310 M20678 M20767 M18546 M19113 M19241 M19579 M20095 M20310 M20679 M20797 M18549 M19119 M19242 M19599 M20098 M20312 M20680 M20833 M18552 M19120 M19243 M19621 M20103 M20114 M20682 M20833 M18555 M19124 M19246 M19730 M20105 M203				0-17-1-11-11				
M18532 M18958 M19218 M19368 M20079 M20305 M20670 M20714 M18533 M18959 M19221 M19374 M20081 M20306 M20671 M20715 M18537 M18960 M19233 M19391 M20083 M20087 M20674 M20716 M18541 M19086 M19238 M19396 M20085 M20309 M20676 M20717 M18545 M19113 M19240 M19463 M20087 M20309 M20678 M20797 M18546 M19119 M19242 M195599 M20095 M20310 M20679 M20797 M18554 M19120 M19243 M19632 M20099 M20313 M20680 M20803 M18555 M19120 M19243 M19632 M200099 M20313 M20681 M20821 M18556 M19124 M19246 M19730 M20105 M20315 M20683 M20836 M18894 M19127 M19251 M19736 M20109 M2	M18523		M19208	M19364	M20059	M20303	M20665	M20712
M18533 M18959 M19221 M19374 M20081 M20306 M20671 M20715 M18537 M18960 M19233 M19391 M20083 M20307 M20674 M20716 M18541 M19086 M19238 M19396 M20085 M20309 M20678 M20717 M18545 M19113 M19240 M19463 M20087 M20309 M20678 M20762 M18546 M19118 M19241 M19579 M20095 M20310 M20679 M20797 M18549 M19119 M19242 M19599 M20098 M20312 M20680 M2083 M18555 M19120 M19244 M19724 M20103 M20314 M20682 M2083 M18855 M19124 M19246 M19730 M20105 M20315 M20683 M20836 M18884 M19125 M19735 M20106 M20316 M20684 M20839 M188914 M19130 M19251 M19733 M20111 M20314 M2068	M18525	M18954	M19214	M19366	M20078	M20304	M20669	M20713
M18537 M18960 M19233 M19391 M20083 M20307 M20674 M20716 M18541 M19086 M19238 M19396 M20085 M20308 M20676 M20717 M18545 M19113 M19240 M19463 M20087 M20309 M20678 M20762 M18546 M19118 M19241 M19579 M20095 M20310 M20679 M2077 M18549 M19119 M19242 M19599 M20098 M20312 M20680 M20803 M18555 M19121 M19244 M19724 M20103 M20314 M20682 M20830 M18856 M19124 M19244 M19730 M20105 M20314 M20682 M20830 M18856 M19124 M19744 M20103 M20314 M20682 M20830 M18888 M19127 M19247 M19735 M20106 M20316 M20684 M20836 M18814 M19130 M19251 M19738 M20109 M20317 M2068	M18532	M18958	M19218	M19368	M20079	M20305	M20670	M20714
M18541 M19086 M19238 M19396 M20085 M20308 M20676 M20717 M18545 M19113 M19240 M19463 M20087 M20309 M20678 M20762 M18546 M19118 M19241 M19579 M20098 M20310 M20680 M200797 M18549 M19119 M19242 M19599 M20098 M20312 M20680 M20083 M18555 M19120 M19244 M19724 M20103 M20314 M20682 M20830 M18856 M19124 M19246 M19730 M20105 M20315 M20683 M20836 M18884 M19125 M19247 M19735 M20105 M20315 M20683 M20836 M188914 M19130 M19251 M19736 M20109 M20317 M20685 M20839 M18917 M19134 M19253 M19738 M20111 M20331 M20686 M20851 M18917 M19138 M19256 M19733 M20113 M2	M18533	M18959	M19221	M19374	M20081	M20306	M20671	M20715
M18545 M19113 M19240 M19463 M20087 M20309 M20678 M20762 M18546 M19118 M19241 M19579 M20095 M20310 M20679 M20797 M18549 M19119 M19242 M19599 M20098 M20312 M20680 M20803 M18555 M19121 M19244 M19724 M20103 M20313 M20681 M20821 M18556 M19124 M19246 M19730 M20105 M20315 M20683 M20836 M18884 M19125 M19247 M19735 M20106 M20316 M20684 M20839 M18889 M19127 M19251 M19736 M20109 M20317 M20685 M20845 M18914 M19130 M19252 M19738 M20113 M20331 M20686 M20851 M18917 M19136 M19253 M19738 M20113 M20334 M20687 M30002 M18919 M19136 M19256 M19733 M20126 M203	M18537	M18960	M19233	M19391	M20083	M20307	M20674	M20716
M18546 M19118 M19241 M19579 M20095 M20310 M20679 M20797 M18549 M19119 M19242 M19599 M20098 M20312 M20680 M20803 M18552 M19120 M19243 M19632 M20099 M20313 M20681 M20821 M18555 M19121 M19246 M19730 M20105 M20315 M20683 M20836 M18856 M19124 M19246 M19730 M20105 M20315 M20683 M20836 M18884 M19125 M19247 M19735 M20106 M20316 M20684 M20839 M18889 M19127 M19251 M19736 M20109 M20317 M20685 M20845 M18914 M19130 M19252 M19737 M20111 M20318 M20686 M20851 M18917 M19134 M19253 M19738 M20113 M20334 M20687 M30002 M18921 M19138 M19258 M19752 M20180 M203	M18541	M19086	M19238	M19396	M20085	M20308	M20676	M20717
M18549 M19119 M19242 M19599 M20098 M20312 M20680 M20803 M18552 M19120 M19243 M19632 M20099 M20313 M20681 M20821 M18555 M19121 M19244 M19724 M20103 M20314 M20682 M20830 M18556 M19124 M19246 M19730 M20105 M20315 M20683 M20839 M18884 M19127 M19251 M19736 M20109 M20317 M20685 M20839 M18889 M19127 M19251 M19736 M20109 M20317 M20685 M20845 M18914 M19130 M19252 M19737 M20111 M20318 M20686 M20851 M18917 M19134 M19253 M19738 M20113 M20334 M20687 M30002 M18919 M19136 M19256 M19743 M20126 M20336 M20688 M30009 M18921 M19138 M19258 M19752 M20180 M203	M18545	M19113	M19240	M19463	M20087	M20309	M20678	M20762
M18552 M19120 M19243 M19632 M20099 M20313 M20681 M20821 M18555 M19121 M19244 M19724 M20103 M20314 M20682 M20830 M18556 M19124 M19246 M19730 M20105 M20315 M20683 M20836 M18884 M19125 M19247 M19735 M20106 M20316 M20684 M20839 M18889 M19127 M19251 M19736 M20109 M20317 M20685 M20845 M18914 M19130 M19252 M19737 M20111 M20318 M20686 M20851 M18917 M19134 M19253 M19738 M20113 M20334 M20687 M30002 M18919 M19136 M19256 M19743 M20126 M20336 M20688 M30002 M18921 M19138 M19258 M19752 M20180 M20336 M20689 M30029 M18922 M19139 M19259 M19755 M20280 M203	M18546	M19118	M19241	M19579	M20095	M20310	M20679	M20797
M18555 M19121 M19244 M19724 M20103 M20314 M20682 M20830 M18556 M19124 M19246 M19730 M20105 M20315 M20683 M20836 M18884 M19125 M19247 M19735 M20106 M20316 M20684 M20839 M18889 M19127 M19251 M19736 M20109 M20317 M20685 M20845 M18914 M19130 M19252 M19737 M20111 M20318 M20686 M20851 M18917 M19134 M19253 M19738 M20113 M20334 M20688 M30002 M18919 M19136 M19256 M19743 M20126 M20336 M20688 M30002 M18921 M19138 M19258 M19752 M20180 M20339 M20689 M30029 M18922 M19139 M19259 M19755 M20280 M20341 M20690 M30040 M18923 M19141 M19260 M19867 M20281 M204	M18549	M19119	M19242	M19599	M20098	M20312	M20680	M20803
M18556 M19124 M19246 M19730 M20105 M20315 M20683 M20836 M18884 M19125 M19247 M19735 M20106 M20316 M20684 M20839 M18889 M19127 M19251 M19736 M20109 M20317 M20685 M20845 M18914 M19130 M19252 M19737 M20111 M20318 M20686 M20851 M18917 M19134 M19253 M19738 M20113 M20334 M20687 M30002 M18919 M19136 M19256 M19743 M20126 M20336 M20688 M30009 M18912 M19138 M19256 M19743 M20180 M20336 M20688 M30009 M18921 M19138 M19258 M19752 M20180 M20339 M20688 M30009 M18921 M19139 M19259 M19755 M20280 M20341 M20690 M30040 M18922 M19141 M19260 M19867 M20281 M204	M18552	M19120	M19243	M19632	M20099	M20313	M20681	M20821
M18884 M19125 M19247 M19735 M20106 M20316 M20684 M20839 M18889 M19127 M19251 M19736 M20109 M20317 M20685 M20845 M18914 M19130 M19252 M19737 M20111 M20318 M20686 M20851 M18917 M19134 M19253 M19738 M20113 M20334 M20687 M30002 M18919 M19136 M19256 M19743 M20126 M20336 M20688 M30009 M18921 M19138 M19258 M19752 M20180 M20339 M20689 M30029 M18922 M19139 M19259 M19755 M20280 M20341 M20690 M30040 M18923 M19141 M19260 M19874 M20281 M20444 M20691 M30042 M18924 M19145 M19261 M19874 M20282 M20454 M20692 M30046 M18925 M19147 M19263 M19882 M20283 M204	M18555	M19121	M19244	M19724	M20103	M20314	M20682	M20830
M18889 M19127 M19251 M19736 M20109 M20317 M20685 M20845 M18914 M19130 M19252 M19737 M20111 M20318 M20686 M20851 M18917 M19134 M19253 M19738 M20113 M20334 M20687 M30002 M18919 M19136 M19256 M19743 M20126 M20336 M20688 M30009 M18921 M19138 M19258 M19752 M20180 M20339 M20689 M30029 M18922 M19139 M19259 M19755 M20280 M20341 M20690 M30040 M18923 M19141 M19260 M19867 M20281 M20444 M20691 M30042 M18924 M19145 M19261 M19874 M20282 M20454 M20692 M30042 M18925 M19147 M19263 M19882 M20283 M20467 M20693 M30047 M18926 M19150 M19263 M19882 M20283 M204	M18556	M19124	M19246	M19730	M20105	M20315	M20683	M20836
M18914 M19130 M19252 M19737 M20111 M20318 M20686 M20851 M18917 M19134 M19253 M19738 M20113 M20334 M20687 M30002 M18919 M19136 M19256 M19743 M20126 M20336 M20688 M30009 M18921 M19138 M19258 M19752 M20180 M20339 M20689 M30029 M18922 M19139 M19259 M19755 M20280 M20341 M20690 M30040 M18923 M19141 M19260 M19867 M20281 M20344 M20691 M30042 M18924 M19145 M19261 M19874 M20282 M20454 M20692 M30046 M18925 M19147 M19263 M19882 M20283 M20467 M20693 M30047 M18926 M19150 M19264 M19892 M20284 M20469 M20694 M30050 M18927 M19151 M19266 M19901 M20286 M204	M18884	M19125	M19247	M19735	M20106	M20316	M20684	M20839
M18917 M19134 M19253 M19738 M20113 M20334 M20687 M30002 M18919 M19136 M19256 M19743 M20126 M20336 M20688 M30009 M18921 M19138 M19258 M19752 M20180 M20339 M20689 M30029 M18922 M19139 M19259 M19755 M20280 M20341 M20690 M30040 M18923 M19141 M19260 M19867 M20281 M20344 M20691 M30042 M18924 M19145 M19261 M19874 M20282 M20454 M20692 M30046 M18925 M19147 M19263 M19882 M20283 M20467 M20693 M30047 M18926 M19150 M19264 M19892 M20284 M20469 M20694 M30050 M18927 M19151 M19265 M19893 M20285 M20473 M20695 M30052 M18932 M19152 M19266 M19910 M20286 M204	M18889	M19127	M19251	M19736	M20109	M20317	M20685	M20845
M18919 M19136 M19256 M19743 M20126 M20336 M20688 M30009 M18921 M19138 M19258 M19752 M20180 M20339 M20689 M30029 M18922 M19139 M19259 M19755 M20280 M20341 M20690 M30040 M18923 M19141 M19260 M19867 M20281 M20444 M20691 M30042 M18924 M19145 M19261 M19874 M20282 M20454 M20692 M30046 M18925 M19147 M19263 M19882 M20283 M20467 M20693 M30047 M18926 M19150 M19264 M19892 M20284 M20469 M20694 M30050 M18927 M19151 M19265 M19893 M20285 M20473 M20695 M30052 M18938 M19152 M19266 M19901 M20286 M20477 M20696 M30055 M18931 M19158 M19267 M19910 M20287 M205	M18914	M19130	M19252	M19737	M20111	M20318	M20686	M20851
M18921 M19138 M19258 M19752 M20180 M20339 M20689 M30029 M18922 M19139 M19259 M19755 M20280 M20341 M20690 M30040 M18923 M19141 M19260 M19867 M20281 M20344 M20691 M30042 M18924 M19145 M19261 M19874 M20282 M20454 M20692 M30046 M18925 M19147 M19263 M19882 M20283 M20467 M20693 M30047 M18926 M19150 M19264 M19892 M20284 M20469 M20694 M30050 M18927 M19151 M19265 M19893 M20285 M20473 M20695 M30052 M18938 M19152 M19266 M19901 M20286 M20477 M20696 M30055 M18931 M19156 M19267 M19910 M20287 M20567 M20697 M30059 M18932 M19158 M19269 M19954 M20288 M205	M18917	M19134	M19253	M19738	M20113	M20334	M20687	M30002
M18922 M19139 M19259 M19755 M20280 M20341 M20690 M30040 M18923 M19141 M19260 M19867 M20281 M20344 M20691 M30042 M18924 M19145 M19261 M19874 M20282 M20454 M20692 M30046 M18925 M19147 M19263 M19882 M20283 M20467 M20693 M30047 M18926 M19150 M19264 M19892 M20284 M20469 M20694 M30050 M18927 M19151 M19265 M19893 M20285 M20473 M20695 M30052 M18928 M19152 M19266 M19901 M20286 M20477 M20696 M30055 M18931 M19156 M19267 M19910 M20287 M20567 M20697 M30059 M18932 M19158 M19269 M19954 M20288 M20572 M20698 M30060 M18934 M19161 M19270 M19965 M20290 M205	M18919	M19136	M19256	M19743	M20126	M20336	M20688	M30009
M18923 M19141 M19260 M19867 M20281 M20344 M20691 M30042 M18924 M19145 M19261 M19874 M20282 M20454 M20692 M30046 M18925 M19147 M19263 M19882 M20283 M20467 M20693 M30047 M18926 M19150 M19264 M19892 M20284 M20469 M20694 M30050 M18927 M19151 M19265 M19893 M20285 M20473 M20695 M30052 M18928 M19152 M19266 M19901 M20286 M20477 M20696 M30055 M18931 M19156 M19267 M19910 M20287 M20567 M20697 M30059 M18932 M19158 M19269 M19954 M20288 M20572 M20698 M30060 M18934 M19161 M19270 M19965 M20290 M20599 M20699 M30065 M18937 M19162 M19271 M19970 M20291 M206	M18921	M19138	M19258	M19752	M20180	M20339	M20689	M30029
M18924 M19145 M19261 M19874 M20282 M20454 M20692 M30046 M18925 M19147 M19263 M19882 M20283 M20467 M20693 M30047 M18926 M19150 M19264 M19892 M20284 M20469 M20694 M30050 M18927 M19151 M19265 M19893 M20285 M20473 M20695 M30052 M18928 M19152 M19266 M19901 M20286 M20477 M20696 M30055 M18931 M19156 M19267 M19910 M20287 M20567 M20697 M30059 M18932 M19158 M19269 M19954 M20288 M20572 M20698 M30060 M18934 M19161 M19270 M19965 M20290 M20599 M20699 M30065 M18938 M19164 M19273 M19970 M20291 M20610 M20700 M30074 M18939 M19169 M19276 M19979 M20293 M206	M18922	M19139	M19259	M19755	M20280	M20341	M20690	M30040
M18925 M19147 M19263 M19882 M20283 M20467 M20693 M30047 M18926 M19150 M19264 M19892 M20284 M20469 M20694 M30050 M18927 M19151 M19265 M19893 M20285 M20473 M20695 M30052 M18928 M19152 M19266 M19901 M20286 M20477 M20696 M30055 M18931 M19156 M19267 M19910 M20287 M20567 M20697 M30059 M18932 M19158 M19269 M19954 M20288 M20572 M20698 M30060 M18934 M19161 M19270 M19965 M20290 M20599 M20699 M30065 M18937 M19162 M19271 M19970 M20291 M20610 M20700 M30067 M18938 M19164 M19273 M19971 M20292 M20627 M20701 M30074 M18939 M19169 M19284 M19981 M20293 M206	M18923	M19141	M19260	M19867	M20281	M20344	M20691	M30042
M18926 M19150 M19264 M19892 M20284 M20469 M20694 M30050 M18927 M19151 M19265 M19893 M20285 M20473 M20695 M30052 M18928 M19152 M19266 M19901 M20286 M20477 M20696 M30055 M18931 M19156 M19267 M19910 M20287 M20567 M20697 M30059 M18932 M19158 M19269 M19954 M20288 M20572 M20698 M30060 M18934 M19161 M19270 M19965 M20290 M20599 M20699 M30065 M18937 M19162 M19271 M19970 M20291 M20610 M20700 M30067 M18938 M19164 M19273 M19971 M20292 M20627 M20701 M30074 M18939 M19169 M19276 M19979 M20293 M20630 M20702 M30079 M18941 M19174 M19284 M19981 M20294 M206	M18924	M19145	M19261	M19874	M20282	M20454	M20692	M30046
M18927 M19151 M19265 M19893 M20285 M20473 M20695 M30052 M18928 M19152 M19266 M19901 M20286 M20477 M20696 M30055 M18931 M19156 M19267 M19910 M20287 M20567 M20697 M30059 M18932 M19158 M19269 M19954 M20288 M20572 M20698 M30060 M18934 M19161 M19270 M19965 M20290 M20599 M20699 M30065 M18937 M19162 M19271 M19970 M20291 M20610 M20700 M30067 M18938 M19164 M19273 M19971 M20292 M20627 M20701 M30074 M18939 M19169 M19276 M19979 M20293 M20630 M20702 M30079 M18941 M19174 M19284 M19981 M20294 M20639 M20703 M30094 M18943 M19182 M19290 M19983 M20295 M206	M18925	M19147	M19263	M19882	M20283	M20467	M20693	M30047
M18928 M19152 M19266 M19901 M20286 M20477 M20696 M30055 M18931 M19156 M19267 M19910 M20287 M20567 M20697 M30059 M18932 M19158 M19269 M19954 M20288 M20572 M20698 M30060 M18934 M19161 M19270 M19965 M20290 M20599 M20699 M30065 M18937 M19162 M19271 M19970 M20291 M20610 M20700 M30067 M18938 M19164 M19273 M19971 M20292 M20627 M20701 M30074 M18939 M19169 M19276 M19979 M20293 M20630 M20702 M30079 M18941 M19174 M19284 M19981 M20294 M20639 M20703 M30094 M18943 M19182 M19290 M19983 M20295 M20642 M20704 M30101 M18944 M19185 M19304 M19985 M20296 M206	M18926	M19150	M19264	M19892	M20284	M20469	M20694	M30050
M18931 M19156 M19267 M19910 M20287 M20567 M20697 M30059 M18932 M19158 M19269 M19954 M20288 M20572 M20698 M30060 M18934 M19161 M19270 M19965 M20290 M20599 M20699 M30065 M18937 M19162 M19271 M19970 M20291 M20610 M20700 M30067 M18938 M19164 M19273 M19971 M20292 M20627 M20701 M30074 M18939 M19169 M19276 M19979 M20293 M20630 M20702 M30079 M18941 M19174 M19284 M19981 M20294 M20639 M20703 M30094 M18943 M19182 M19290 M19983 M20295 M20642 M20704 M30101 M18944 M19185 M19304 M19985 M20296 M20646 M20705 M30119 M18947 M19187 M19319 M19991 M20298 M206	M18927	M19151	M19265	M19893	M20285	M20473	M20695	M30052
M18932 M19158 M19269 M19954 M20288 M20572 M20698 M30060 M18934 M19161 M19270 M19965 M20290 M20599 M20699 M30065 M18937 M19162 M19271 M19970 M20291 M20610 M20700 M30067 M18938 M19164 M19273 M19971 M20292 M20627 M20701 M30074 M18939 M19169 M19276 M19979 M20293 M20630 M20702 M30079 M18941 M19174 M19284 M19981 M20294 M20639 M20703 M30094 M18943 M19182 M19290 M19983 M20295 M20642 M20704 M30101 M18944 M19185 M19304 M19985 M20296 M20646 M20705 M30109 M18945 M19186 M19312 M19988 M20297 M20647 M20706 M30111 M18948 M19188 M19320 M19997 M20299 M206	M18928	M19152	M19266	M19901	M20286	M20477	M20696	M30055
M18934 M19161 M19270 M19965 M20290 M20599 M20699 M30065 M18937 M19162 M19271 M19970 M20291 M20610 M20700 M30067 M18938 M19164 M19273 M19971 M20292 M20627 M20701 M30074 M18939 M19169 M19276 M19979 M20293 M20630 M20702 M30079 M18941 M19174 M19284 M19981 M20294 M20639 M20703 M30094 M18943 M19182 M19290 M19983 M20295 M20642 M20704 M30101 M18944 M19185 M19304 M19985 M20296 M20646 M20705 M30109 M18945 M19186 M19312 M19988 M20297 M20647 M20706 M30111 M18947 M19187 M19319 M19991 M20298 M20656 M20707 M30115 M18948 M19189 M19322 M20030 M20300 M206	M18931	M19156	M19267	M19910	M20287	M20567	M20697	M30059
M18937 M19162 M19271 M19970 M20291 M20610 M20700 M30067 M18938 M19164 M19273 M19971 M20292 M20627 M20701 M30074 M18939 M19169 M19276 M19979 M20293 M20630 M20702 M30079 M18941 M19174 M19284 M19981 M20294 M20639 M20703 M30094 M18943 M19182 M19290 M19983 M20295 M20642 M20704 M30101 M18944 M19185 M19304 M19985 M20296 M20646 M20705 M30109 M18945 M19186 M19312 M19988 M20297 M20647 M20706 M30111 M18947 M19187 M19319 M19991 M20298 M20656 M20707 M30115 M18948 M19189 M19322 M20030 M20300 M20660 M20709 M30168 M18951 M19190 M19323 M20035 M20301 M206	M18932	M19158	M19269	M19954	M20288	M20572	M20698	M30060
M18938 M19164 M19273 M19971 M20292 M20627 M20701 M30074 M18939 M19169 M19276 M19979 M20293 M20630 M20702 M30079 M18941 M19174 M19284 M19981 M20294 M20639 M20703 M30094 M18943 M19182 M19290 M19983 M20295 M20642 M20704 M30101 M18944 M19185 M19304 M19985 M20296 M20646 M20705 M30109 M18945 M19186 M19312 M19988 M20297 M20647 M20706 M30111 M18947 M19187 M19319 M19991 M20298 M20656 M20707 M30115 M18948 M19188 M19320 M19997 M20299 M20659 M20708 M30137 M18949 M19189 M19322 M20030 M20300 M20660 M20710 M30170 M18951 M19190 M19323 M20035 M20301 M206	M18934	M19161	M19270	M19965	M20290	M20599	M20699	M30065
M18939 M19169 M19276 M19979 M20293 M20630 M20702 M30079 M18941 M19174 M19284 M19981 M20294 M20639 M20703 M30094 M18943 M19182 M19290 M19983 M20295 M20642 M20704 M30101 M18944 M19185 M19304 M19985 M20296 M20646 M20705 M30109 M18945 M19186 M19312 M19988 M20297 M20647 M20706 M30111 M18947 M19187 M19319 M19991 M20298 M20656 M20707 M30115 M18948 M19188 M19320 M19997 M20299 M20659 M20708 M30137 M18949 M19189 M19322 M20030 M20300 M20660 M20709 M30168 M18951 M19190 M19323 M20035 M20301 M20662 M20710 M30170	M18937	M19162	M19271	M19970	M20291	M20610	M20700	M30067
M18941 M19174 M19284 M19981 M20294 M20639 M20703 M30094 M18943 M19182 M19290 M19983 M20295 M20642 M20704 M30101 M18944 M19185 M19304 M19985 M20296 M20646 M20705 M30109 M18945 M19186 M19312 M19988 M20297 M20647 M20706 M30111 M18947 M19187 M19319 M19991 M20298 M20656 M20707 M30115 M18948 M19188 M19320 M19997 M20299 M20659 M20708 M30137 M18949 M19189 M19322 M20030 M20300 M20660 M20709 M30168 M18951 M19190 M19323 M20035 M20301 M20662 M20710 M30170	M18938	M19164	M19273	M19971	M20292	M20627	M20701	M30074
M18943 M19182 M19290 M19983 M20295 M20642 M20704 M30101 M18944 M19185 M19304 M19985 M20296 M20646 M20705 M30109 M18945 M19186 M19312 M19988 M20297 M20647 M20706 M30111 M18947 M19187 M19319 M19991 M20298 M20656 M20707 M30115 M18948 M19188 M19320 M19997 M20299 M20659 M20708 M30137 M18949 M19189 M19322 M20030 M20300 M20660 M20709 M30168 M18951 M19190 M19323 M20035 M20301 M20662 M20710 M30170	M18939	M19169	M19276	M19979	M20293	M20630	M20702	M30079
M18944 M19185 M19304 M19985 M20296 M20646 M20705 M30109 M18945 M19186 M19312 M19988 M20297 M20647 M20706 M30111 M18947 M19187 M19319 M19991 M20298 M20656 M20707 M30115 M18948 M19188 M19320 M19997 M20299 M20659 M20708 M30137 M18949 M19189 M19322 M20030 M20300 M20660 M20709 M30168 M18951 M19190 M19323 M20035 M20301 M20662 M20710 M30170	M18941	M19174	M19284	M19981	M20294	M20639	M20703	M30094
M18945 M19186 M19312 M19988 M20297 M20647 M20706 M30111 M18947 M19187 M19319 M19991 M20298 M20656 M20707 M30115 M18948 M19188 M19320 M19997 M20299 M20659 M20708 M30137 M18949 M19189 M19322 M20030 M20300 M20660 M20709 M30168 M18951 M19190 M19323 M20035 M20301 M20662 M20710 M30170	M18943		M19290		M20295			M30101
M18947 M19187 M19319 M19991 M20298 M20656 M20707 M30115 M18948 M19188 M19320 M19997 M20299 M20659 M20708 M30137 M18949 M19189 M19322 M20030 M20300 M20660 M20709 M30168 M18951 M19190 M19323 M20035 M20301 M20662 M20710 M30170	M18944	M19185	M19304	M19985	M20296		M20705	M30109
M18948 M19188 M19320 M19997 M20299 M20659 M20708 M30137 M18949 M19189 M19322 M20030 M20300 M20660 M20709 M30168 M18951 M19190 M19323 M20035 M20301 M20662 M20710 M30170	M18945	M19186	M19312	M19988	M20297	M20647	M20706	M30111
M18949 M19189 M19322 M20030 M20300 M20660 M20709 M30168 M18951 M19190 M19323 M20035 M20301 M20662 M20710 M30170		M19187	M19319		M20298	M20656	M20707	
M18951 M19190 M19323 M20035 M20301 M20662 M20710 M30170	M18948	M19188	M19320	M19997	M20299	M20659	M20708	M30137
	M18949	M19189		M20030	M20300			
M18952 M19194 M19328 M20057 M20302 M20664 M20711 M30177	M18951	M19190	M19323	M20035	M20301	M20662		M30170
	M18952	M19194	M19328	M20057	M20302	M20664	M20711	M30177



Excluded S/N of the blade assy

On the excluded S/N the inspection of the drain hole alignment of the blade assy has been accomplished in the serial production. These blade assys have been considered as category A as shown in Table 1.

M30178	M30496	M30633	M30850	M31097	M31181	M31222	M31383
M30182	M30517	M30634	M30852	M31098	M31182	M31223	M31384
M30189	M30535	M30636	M30854	M31099	M31183	M31224	M31385
M30192	M30549	M30637	M30855	M31100	M31184	M31225	M31386
M30210	M30551	M30638	M30856	M31101	M31185	M31226	M31387
M30211	M30553	M30639	M30857	M31102	M31186	M31227	M31390
M30221	M30592	M30683	M30860	M31104	M31188	M31228	M31391
M30226	M30600	M30688	M30861	M31105	M31189	M31229	M31392
M30228	M30601	M30692	M30862	M31106	M31190	M31230	M31393
M30239	M30602	M30696	M30864	M31108	M31191	M31231	M31394
M30283	M30603	M30700	M30868	M31109	M31192	M31232	M31395
M30285	M30604	M30713	M30871	M31110	M31193	M31233	M31396
M30309	M30605	M30714	M30872	M31111	M31194	M31234	M31397
M30313	M30606	M30719	M30873	M31112	M31195	M31235	M31398
M30329	M30607	M30800	M30874	M31113	M31196	M31236	M31399
M30401	M30608	M30801	M30876	M31114	M31197	M31237	M31400
M30402	M30609	M30804	M30877	M31115	M31198	M31238	M31401
M30403	M30610	M30805	M30878	M31116	M31199	M31239	M31402
M30404	M30611	M30808	M30892	M31117	M31200	M31360	M31403
M30405	M30612	M30810	M30899	M31118	M31201	M31361	M31404
M30406	M30613	M30812	M30903	M31119	M31202	M31362	M31405
M30407	M30614	M30816	M30913	M31131	M31203	M31363	M31406
M30408	M30615	M30819	M31059	M31160	M31204	M31364	M31407
M30410	M30616	M30820	M31065	M31161	M31205	M31365	M31408
M30411	M30617	M30822	M31080	M31162	M31206	M31366	M31409
M30413	M30618	M30825	M31082	M31163	M31207	M31367	M31410
M30415	M30619	M30826	M31083	M31164	M31208	M31368	M31411
M30419	M30620	M30827	M31084	M31165	M31209	M31369	M31412
M30421	M30621	M30828	M31085	M31166	M31210	M31370	M31413
M30425	M30622	M30831	M31086	M31167	M31211	M31371	M31414
M30428	M30623	M30832	M31087	M31168	M31212	M31372	M31415
M30429	M30624	M30838	M31088	M31172	M31213	M31373	M31416
M30430	M30625	M30840	M31089	M31173	M31214	M31374	M31417
M30431	M30626	M30841	M31090	M31174	M31215	M31375	M31418
M30434	M30627	M30842	M31091	M31175	M31216	M31376	M31419
M30436	M30628	M30843	M31092	M31176	M31217	M31377	M31420
M30437	M30629	M30844	M31093	M31177	M31218	M31378	M31421
M30439	M30630	M30847	M31094	M31178	M31219	M31380	M31422
M30443	M30631	M30848	M31095	M31179	M31220	M31381	M31423
M30485	M30632	M30849	M31096	M31180	M31221	M31382	M31424



Excluded S/N of the blade assy

On the excluded S/N the inspection of the drain hole alignment of the blade assy has been accomplished in the serial production. These blade assys have been considered as category A as shown in Table 1.

M31425 M31557 M31718	M31879	M31919	M32079	M32119	M32199
NACA ACC					
M31426 M31558 M31719	M31880	M32040	M32080	M32160	end of list
M31427 M31559 M31840	M31881	M32041	M32081	M32161	
M31428 M31680 M31841	M31882	M32042	M32082	M32162	
M31429 M31681 M31842	M31883	M32043	M32083	M32163	
M31430 M31682 M31843	M31884	M32044	M32084	M32164	
M31431 M31683 M31844	M31885	M32045	M32085	M32165	
M31432 M31684 M31845	M31886	M32046	M32086	M32166	
M31433 M31685 M31846	M31887	M32047	M32087	M32167	4,
M31434 M31686 M31847	M31888	M32048	M32088	M32168	
M31435 M31687 M31848	M31889	M32049	M32089	M32169	
M31436 M31688 M31849	M31890	M32050	M32090	M32170	
M31437 M31689 M31850	M31891	M32051	M32091	M32171	
M31438 M31690 M31851	M31892	M32052	M32092	M32172	
M31439 M31691 M31852	M31893	M32053	M32093	M32173	
M31520 M31692 M31854	M31894	M32054	M32094	M32174	
M31521 M31693 M31855	M31895	M32055	M32095	M32175	5
M31525 M31694 M31856	M31896	M32056	M32096	M32176	
M31526 M31695 M31857	M31897	M32057	M32097	M32177	
M31527 M31696 M31858	M31898	M32058	M32098	M32178	
M31534 M31697 M31859	M31899	M32059	M32099	M32179	
M31536 M31698 M31860	M31900	M32060	M32100	M32180	
M31537 M31699 M31861	M31901	M32061	M32101	M32181	
M31539 M31700 M31862	M31902	M32062	M32102	M32182	
M31540 M31701 M31863	M31903	M32063	M32103	M32183	
M31541 M31702 M31864	M31904	M32064	M32104	M32184	
M31542 M31704 M31865	M31905	M32065	M32105	M32185	
M31543 M31705 M31866	M31906	M32066	M32106	M32186	
M31544 M31706 M31867	M31907	M32067	M32107	M32187	
M31545 M31707 M31868	M31908	M32068	M32108	M32188	
M31546 M31708 M31869	M31909	M32069	M32109	M32189	
M31547 M31709 M31870	M31910	M32070	M32110	M32190	
M31548 M31710 M31871	M31911	M32071	M32111	M32191	
M31550 M31711 M31872	M31912	M32072	M32112	M32192	
M31551 M31712 M31873	M31913	M32073	M32113	M32193	
M31552 M31713 M31874	M31914	M32074	M32114	M32194	
M31553 M31714 M31875	M31915	M32075	M32115	M32195	
M31554 M31715 M31876	M31916	M32076	M32116	M32196	
M31555 M31716 M31877	M31917	M32077	M32117	M32197	
M31556 M31717 M31878	M31918	M32078	M32118	M32198	



4.C Pre-print of the inspection - tail rotor blade (AMM 64-22-00, 6-4)

Tail Rotor - Inspection

EFFECTIVITY ALL

6-4 Inspection - Tail Rotor Blade

A. References:

INTRODUCTION

18-11-00, 5-1 Dynamic Balancing - Tail Rotor

20-00-00, 2-18 Application Procedure - Varnish CM 515

64-22-00, 4-4 Assembly - Tail Rotor <

64-22-00, 8-1 Repair - Tail Rotor Blade

64-22-00, 8-4 Bonding - Balancing Weight Bushing in the Blade Root

B. Special Tools:

None.

C. Consumable Materials:

CM 515Varnish

D. Routine Replacement Parts:

None.

E. Job Set-up:

(1) None

F. Procedure:

CAUTION

WHEN YOU DO WORK ON "CRITICAL PARTS ($^{\it CP}$)" AND "IMPORTANT PARTS ($^{\it IP}$)", OBEY THE RELATED INSTRUCTIONS IN THE (INTRODUCTION).

- (1) Do the inspection of the tail rotor blade CP (1, Figure 601) as follows:
 - (a) Examine the *tail rotor blade* ^{CP} (1) for:
 - Cracks
 - Mechanical damage
 - Corrosion
 - Erosion
 - Damage to the paint
 - Wear of the black plasma layer on the bearing surfaces
 - Correct installation of the balance weight bushing in the blade root (2).

NOTE

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On the tip of the *tail rotor blade* CP (1), at the trailing edge corner, a radius R Figure 602 of 0 mm to 5 mm (0 in to 0.196 in) is permitted.

1 If there is a crack or if the damage is outside the permitted damage and repair

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- Aircraft Maintenance Manual (AMM) EC135
- limits (Table 601), replace the tail rotor blade CP (1) (64-22-00, 4-4).
- $\underline{2}$ If there is mechanical damage and/or corrosion within the damage and repair limits (Table 601), repair the *tail rotor blade* CP (1) (64-22-00, 8-1).
- <u>3</u> If you find erosion on the blade leading edge, measure the blade chord in the area of maximum erosion damage.
 - \underline{a} If the measured blade chord is less than 48.5 mm (1.90 in), replace the tail rotor blade CP (1) (64-22-00, 4-4).

Zone (Figure 602)	Damage Limits (without repair)	Repair Limits (repair possible)
А	MAX radius of 2 mm (0.078 in)	MAX radius of 2 mm (0.078 in)
В	Dent with MAX depth of 0.45 mm (0.017 in)	Score with MAX depth of 0.45 mm (0.017 in) MIN residual blade chord of 48.5 mm (1.91 in) MAX length of 30 mm (1.181 in) in blade span direction
С	Dent with MAX depth of 0.45 mm (0.017 in)	Score with MAX depth of 0.45 mm (0.017 in) MIN residual blade chord of 48.5 mm (1.91 in)
D	Score with MAX depth of 0.01 mm (0.0003 in) Dent with MAX depth of 0.05 mm (0.001 in)	Score with MAX depth of 0.05 mm (0.001 in) MIN of 10 mm (0.394 in) in radius transition
E	Dent with MAX depth of 0.1 mm (0.0039 in) MAX of 0.5 mm (0.019 in) of diameter Score with MAX depth of 0.01 mm (0.0003 in)	Score with MAX depth of 0.15 mm (0.005 in) MIN distance of 2 mm (0.079 in) between scores Dent with MAX depth of 0.2 mm (0.007 in) and MIN of 2 mm (0.079 in) of distance between dents
F	MAX of 10 % of the varnish surface On the plasma layer, damage up to a maximum diameter of 2 mm (0.078 in) or with a maximum surface of 3 mm² (0.004 in²) on the plasma layer On the plasma layer, MIN distance of 7 mm (0.276 in) between damage and not more than 10 damages on each bearing surface	
G	Scratch with MAX depth of 0.1 mm (0.0039 in)	Scratch with MAX depth of 1 mm (0.039 in)

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Zone (Figure 602)	Damage Limits (without repair)	Repair Limits (repair possible)
Н	For any anomalies found on the Upper and Lower surface, including the rib and the drain hole contact your local Airbus representative.	No repair is permitted
ØA	MAX diameter of 14.53 mm (0.572 in)	
ØB	MAX diameter of 13.53 mm (0.532 in)	

Table 601 Damage and Repair Limits

CAUTION

RISK OF DAMAGE TO THE HUB BODY (4, FIGURE 601). IF YOU DO NOT APPLY THE VARNISH CORRECTLY, YOU CAN CAUSE DAMAGE TO THE HUB BODY (4). MAKE SURE YOU APPLY THE VARNISH CORRECTLY.

CAUTION

RISK OF DAMAGE TO THE HUB BODY (4). IF YOU DO NOT KEEP THE MINIMUM DIMENSION X AND DIMENSION Y, DAMAGE TO THE HUB BODY (4) CAN OCCUR. MAKE SURE YOU KEEP THE MINIMUM DIMENSION X AND DIMENSION Y.

- (b) If the damage to the varnish in Zone F *Figure 602* on the bearing races is outside the damage and repair limits (Table 601), apply Varnish CM 515 to the damaged area (20-00-00, 2-18).
 - Make sure that the thickness of the layer of Varnish CM 515 is between 0.007 mm and 0.015 mm (0.0003 in and 0.0005 in).
 - Make sure that the dimension X on the inner bearing ring (5, Figure 601) is a minimum of 0.7 mm (0.028 in).
 - $\underline{3}$ Make sure that the dimension Y on the outer bearing ring (3) is a minimum of 0.8 mm (0.032 in).

CAUTION

RISK OF DAMAGE TO THE METAL SURFACE OF THE BLADE ROOT (2). IF YOU DO NOT REMOVE THE LAYER OF VARNISH CAREFULLY YOU CAN CAUSE DAMAGE TO THE METAL SURFACE OF THE BLADE ROOT (2). MAKE SURE YOU DO NOT CAUSE DAMAGE TO THE METAL SURFACE OF THE BLADE ROOT (2) WHEN YOU REMOVE THE LAYER OF VARNISH.

(c) If the dimension X and the dimension Y are less than the minimum distances, carefully remove Varnish CM 515 with Abrasive Paper (grain 400).

NOTE

If the balance weight bushing is loose, it can rotate in the blade root (2).

NOTE

If you cannot remove the balance weight bushing with your hand, you can use the *tail rotor blade* CP (1) again.

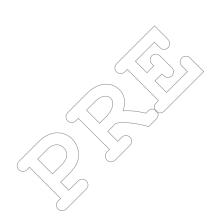
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- (d) Bond the loose balance weight bushing (64-22-00, 8-4).
- (e) Install the *tail rotor blades* ^{CP} (1, *Figure 602*) repaired to the maximum permitted limits or damaged in the area X of Zone E as follows:
 - $\underline{1}$ If two *tail rotor blades* CP (1) have equivalent repair conditions, install these *tail rotor blades* CP (1) opposite to each other (64-22-00, 4-4).
 - If more than two tail rotor blades install these tail rotor blades of the conditions, install these tail rotor blades of the conditions of the conditions
- (f) Install the remaining tail rotor blades ^{CP} (1) (64-22-00, 4-4).
- (2) If the blades are replaced or if they change positions, do the balance of the tail rotor (18-11-00, 5-1).

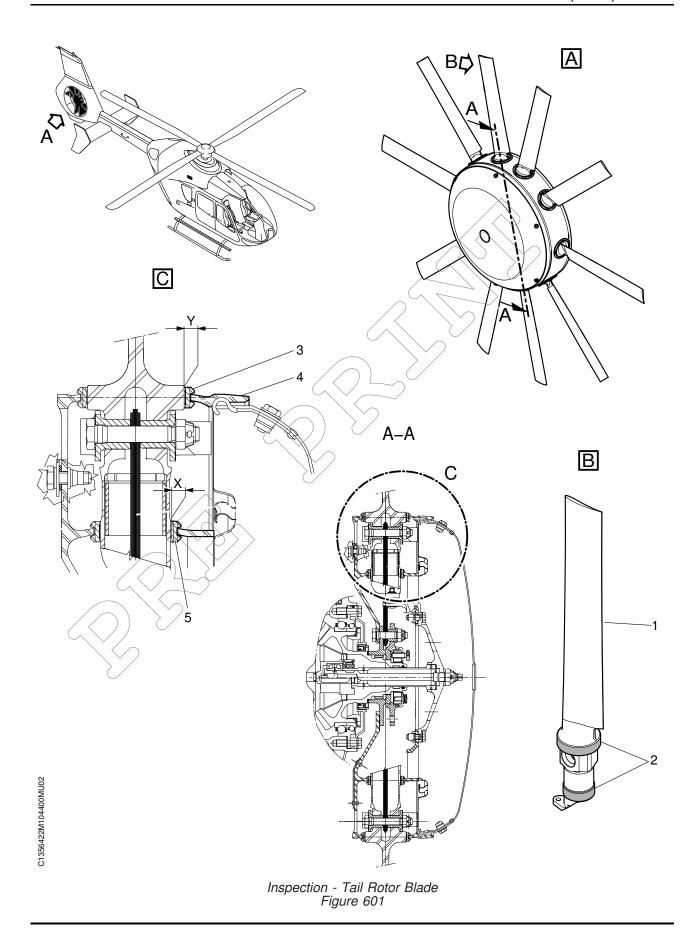
G. Close-up:

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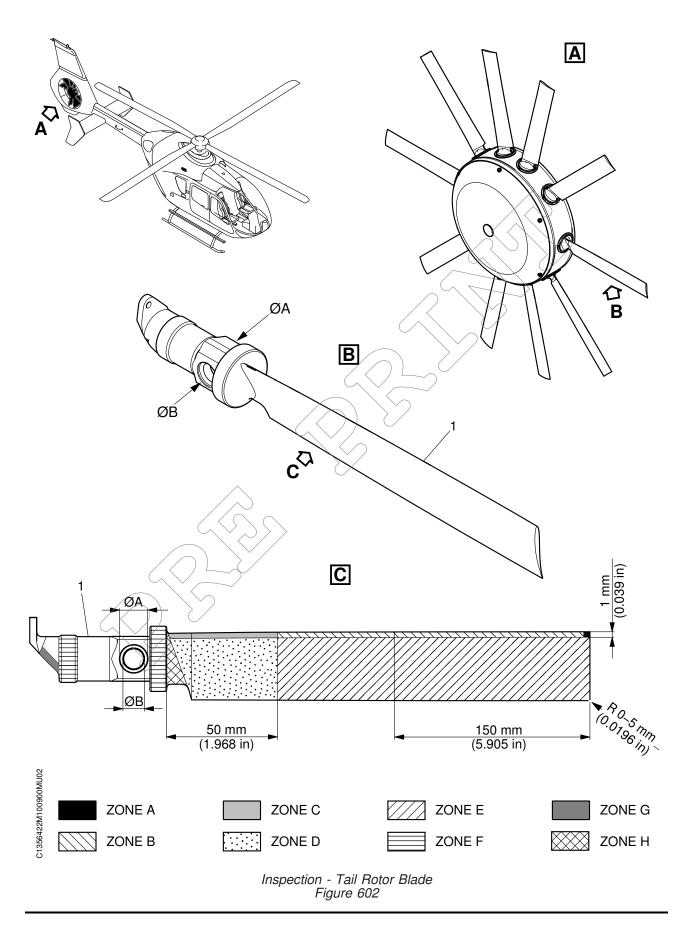
(1) Remove all tools and other materials and clean the work area.



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END OF MODULE

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